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## Word Formation Process in SMS Language: A Prognosis of Gender Identity

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### ABSTRACT

Short Message Service (SMS) language can be classified in itself as a variety of written language. The classification of SMS as a distinct variety is based on the uniqueness of the way it is written, since this variety is based only on written form and not speech. This article examines the Word Formation Processes that are used in SMS language by the Bachelor of Business Administration (BBA) students of University of Management and Technology (UMT), Pakistan. The article also explores the choices of Word Formation Processes (WFPs) that are made by males and females. The data was collected from 50 male and 50 female students enrolled in the BBA program of a private university of Lahore. The research questions were related to the use of Word Formation Processes and the research hypotheses were tested to distinguish WFPs as a marker of Gender identity. The results revealed that Standard Word Formation Processes are used more in the SMS language as compared to non-standard WFPs and it also revealed that there is a significant difference in the choices of males and females.

**Keywords:** word formation processes, gender identity, standard WFPs, non-standard WFPs

### Introduction

The use of mobile phones is rapidly increasing in Pakistan. According to the sources in e-commerce market, at the end of December 2016 the number of mobile phone users in Pakistan will have risen to 40 million. Short Message Services (SMS) is a type of instant messaging system through which the user can send a message of up to 160 characters to any mobile phone (Leung 2007; Phau & Teah 2009). SMS is known as the most popular mobile data application. According to Forbes (2006), the use of SMS service is up to 65% on daily basis. The average SMS that Pakistanis sent were over 151 billion text messages during the year 2009 to Nokia. Pakistan is the 3<sup>rd</sup> highest country that produces SMS traffic. Mobile phone users try to write their messages in minimal words in order to save their time and money (Bodomo 2009; Balakrishnan & Yeow 2008;

Segerstad 2005). Bodomo says about SMS language, “words, phrases and sentences should be coded with as few symbols as possible without giving up comprehensibility” (Bodomo 2009, 113).

The linguistic analysis of text messages was not very common during the initial years of the use of SMS but with the passage of time it gained momentum. A number of studies have been done by various scholars on SMS language. A large corpus based study on about 1100 SMSs was conducted by Tag (2003). Unlike the current study, Tag’s (2003) study was based on monolingual English speakers. In Pakistan, few studies have been conducted on the linguistic analysis of SMS texts, such as Aslam, Ahmad, and Sajid (2011), Janjua (2010) and Rafi (2008, 2010). Pakistan is a bilingual/multilingual country where English and Urdu languages are frequently mixed and switched with each other. Urdu is the national language and English is the official language of Pakistan. In this bilingual setting, code mixing of English and Urdu in the SMS language is different from studies of SMS language in a monolingual setting. Baumgardner (1993) argues that English in Pakistan is undergoing the process of localization and the effect of this process on local languages is causing language change. In Pakistan, the student community is a regular user of mobile phones and sending text messages. According to Thurlow (2003), young people are slaves of growing text message culture. With the increased use of text messaging among students, there has been a growing concern that this practice is affecting the use of language especially its standard variety. However, the linguistic analysis of SMS language is sporadic and the research is limited to abbreviations and use of non-standardized language.

### *Purpose of statement*

The purpose of this study is to identify different Word Formation Processes (WFPs) used in the SMS language of Urdu/English bilinguals in Pakistan. Pakistan is a multilingual country with a variety of languages spoken across the country but the most commonly used languages are Urdu and English. The script of SMS writing is usually Roman for both English and Urdu SMS. There is an immense use of Urduised words in the English language. A number of studies have been conducted to analyze the patterns and styles of SMS language but this study aims to identify the use of different Word Formation Processes in the SMS language of Urdu/English bilingual students of BBA in Lahore and to examine the role of Gender in the Word Formation Process of Urdu/English bilingual students of BBA in Lahore. This study investigates WFPs of both English and Urdu in SMS texts.

### *Objectives*

The study aims to explore different WFPs used in the SMS language and the usage of WFPs as an indicator of Gender in the context of SMS language of Urdu/English Bilinguals of Lahore. The study has been designed to attain the following objectives;

1. To identify different WFPs used in SMS language of Urdu/English Bilinguals
2. To identify the use of various WFPs as a prognosis of Gender Distinctiveness

### ***Research question***

1. What type of word formation processes are used in the SMS language of male and female bilingual students of BBA at UMT Lahore?
2. What, if the Standard Word Formation Processes are used more frequently in their SMS language as compared to Non-standard Word formation Processes

### ***Research hypothesis***

1. (H<sub>0</sub>) There is no significant difference in the mean score of male and female students of BBA in using Clipping in the SMS language
2. (H<sub>0</sub>) There is a no significant difference in the mean score of male and female students of BBA in the use of Word Formation Processes in SMS language.

### ***Literature review***

Communication through SMS is the most common, easy and frequent way of interaction. SMS technology was first introduced in Europe in the early 90s (Crystal 2004). SMS language is considered a new form of language and there are a number of studies conducted to analyze the language of SMS text. SMS language is also considered to resemble internet mediated CMC language (Hussain 2013). SMS language is considered to be short, informal, and full of abbreviations and condensed syntax. SMS language has its own specific lexical and syntactic choices that make it different from other written languages. Additionally, its element of hybridizing spoken-written structures portrays this written variety like the spoken form of language. On account of bilingual social orders, the regular code modifications make it a specific written variety. In this regard, linguistic features of text messages can be classified under various extensive groups like syntactic, punctuation, lexical, space and script adaptations. The most notable feature among them is lexical adaptation (Hussain 2013). Thurlow & Poff (2011) argue that text messages have many unusual linguistic forms such as shortenings, contractions, acronyms, letter/number homophones, misspellings and typos, and non-conventional spellings. The element of code mixing and code switching is confined to the bilingual societies. Bilingual speakers use their language more efficiently when they have different choices of language in order to pass their message. Words in SMS language are borrowed from English, because English is enriched with special vocabulary which other languages lack (Hussain 2013). In this context, Thurlow and Poff (2011) conducted a couple of researches directed on code switching and mixing in text messages in multilingual societies, especially in the countries where English is learnt as a second language. They observed that South African isiXhosa texts are blended with English by writing isiXhosa prefixes with English nouns.

In Pakistan, there is an evident growing in the use of SMS. According to the report of Pakistan Telecommunication Authority (2010) SMS traffic in 2009 extended up to 151.6 billion and 7190 SMS traffic per second. It is thus necessary for researchers to understand the language

that is used in this mode of communication. The language used in SMS is emerging as a new type of language with its own distinct features. According to Bodomo (2010) Mobile phone is a much accessible and influential medium of communication.

A number of studies have been conducted to analyze the language used in SMS. William and Gilchrist (2011) have examined the scope of technical choices accessible for SMS-based options of communication in Pakistan. They developed the term “viral messaging” for the trend of accepting and sending forward texts without having any information about the personality, credibility and reliability about the content authors. Hussain (2013) studied the ethnical and social concerns about SMS language in Pakistan. He has also explored the linguistic features used in the SMS language of Pakistan. Aslam and Ali (2012) have outlined marker of gender individuality through frequency of learned words of English in Pakistan. This study reveals that the presence of code switching in SMS occurs due to learned words of English. Rafi (2010) compared texts of male and females and highlighted the text along gender differences. His study disclosed that females use the more sophisticated and standard form of language than men. Rafi (2008) in his article “The Sociolinguistics of SMS Ways to Identify Gender Boundaries” explains how male and female styles and patterns are different from each other and what factors account for this difference. According to Rafi (2008) 62% of females and 38% of males prefer to communicate through SMS. Wood (2001) stated that men and women communicate in a very different way. There is an immense difference in the way they speak and choose words; their tone is also different from each other. Speaking is different from writing and SMS users can make different choices of words in writing because when writing one can correct the errors and change the words but in speaking once something is said it cannot be changed.

This study is about the use of SMS oriented language. It focuses on the structures of the words used in SMS language and also the formation of words that are used in SMS writing. The study intends to reveal the pattern of Word Formation that is used in SMS language of Urdu/English bilinguals. The study also reflects on how words are formed in SMS language by using two different languages and the impact of Urdu language on English and vice versa. Fromklin and Rodman (1993) argues that because of lexical changes new words are formed and these new words enter the language in several ways and forms that involves derivational and inflectional processes, coinage, blending, backformation and clipping. In Clipping words are formed through reduction. This process is often seen in the word formation of SMS language of Urdu/English bilinguals. In clipping words are omitted from the start, middle or the end. Contraction is another most prominent feature of SMS language of Urdu English bilinguals. It involves shortening and reduction of alphabets of the words. In this process a single word or two words are contracted by dropping the middle word (Thurlow 2013). In contraction alphabets are omitted and a single word has many contracted forms. Contracted forms are used in SMS language because it saves time and it is convenient. Initialism is very evident in the WFP of SMS language of Urdu/English bilinguals. The process of initialism is classified into two different terms that are *Alphabetism* and *Acronyms*. This division is on the basis of their rule of their pronunciation. In Alphabetism all letters re pronounced as separate words e.g. UAE, ATM, UMT and ILM etc.

Whereas in Acronyms all the alphabets are pronounced as a single word but all the alphabets are written in capital words like RAM, ROM, DELL and NUST etc. The word formation process falls under the umbrella of morphology which is the study of the structure of the word. Because of the limited space of writing, the words in SMS language are written as short as possible (Taniar 2007). Bodomo (2004) argues that the formation of new forms of words is the demand of new tools of communication. These new forms of words make their place in the society and get acceptance with the passage of time. The new forms of words compete with the existed forms and this causes a change in the language. SMS language is different from the standard language because firstly, in the mobile phones key pads are very small, so it becomes difficult to press each letter. Secondly, message characters were limited to 160 words and lastly it is convenient to write the short forms of words as it save time, money and it is also a quick way of sending SMS. In the bilingual Urdu/English context new forms of words are emerging in SMS language. The change in SMS language is may be because of inter-mixing of both languages. There are many morphological features in SMS writing that separate it from the normal standard writing and the most prominent feature is the shortening of words. In CMC the shortening of text is widely studied but the scholarly research in SMS is still sporadic

### **Method and procedure**

Descriptive survey method is used for the collection of data .A sample of 100 participants- 50 males and 50 females from Bachelors in Business Administration (BBA) discipline were selected. The data was gathered in the form of questionnaire. The questionnaire was developed in the form of a Likert scale. The age of the participants was between 18-25 years. Students were conveniently selected for data collection, because youth prefers communication through the means of SMS. The data was collected within a period of 2 weeks. A sample was drawn by convenient sampling and a private university in Lahore was selected where undergraduates were studying from all over Pakistan and of every stratum of society.

The research falls into the quantitative paradigm. The reliability of the instrument of data collection was .874 and it was ensured by applying *Cronbach's alpha Analysis* .A Likert Scale was used for the collection of data and the items in the questionnaire were developed on the basis of different WFPs that are observed in SMS language. In the personal profile students were asked to specify their gender and age. The questionnaire was based on 20 items. In the questionnaire 1-7 questions were of general nature about the use and features of a mobile phone and 8-20 were about the different Word Formation Processes used in SMS language. . This study followed the Ethical Guidelines suggested by Mann and Stewart (2000, 40-47), for collecting data. The research focused on the Word Formation Processes that are used in the writing of a text message.

### **Framework**

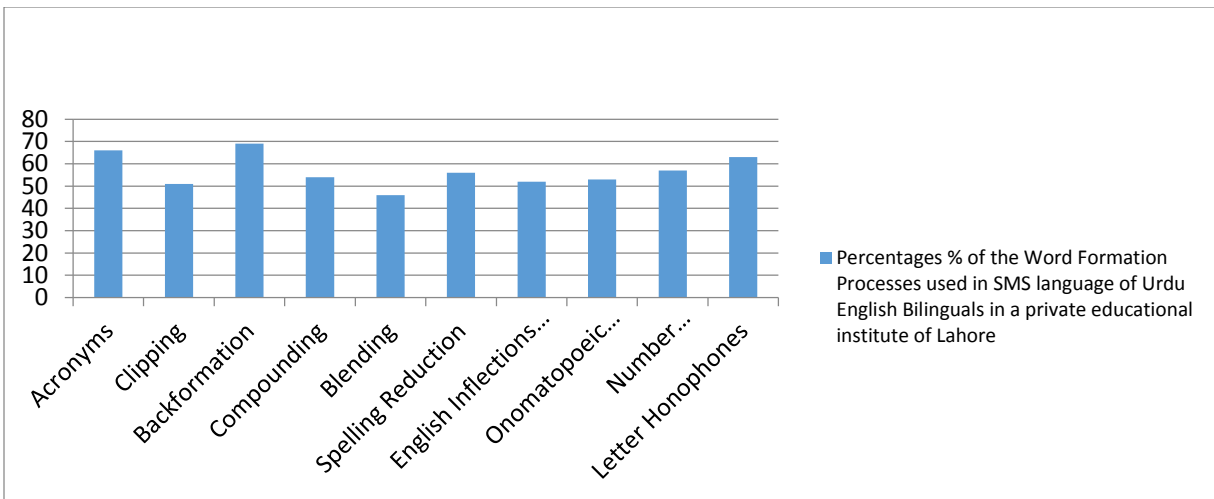
A research design in any study provides a clear theoretical and methodological framework of the study. The present study is descriptive in nature. From theoretical point of view, the study is

directed by the influence of modern information technologies on human languages (Hussain 2013). This study follows the theoretical framework, i.e. Technology-conditioned approach to Language Change and Use (TeLCU), proposed by Bodomo and Lee (Bodomo and Lee 2002; Bodomo 2010). This framework promotes the view that there is a direct relationship between the formation of new forms of languages and medium of communication. The new medium of communicating creates new forms of words and these new forms compete with the existing forms resulting in a change in language. The framework emphasizes the causal relationship between the emergence of new ICTs and the development of new forms of language. Thus, changes occur in language because of new sources of communication (Bosco 2007).

### Data analysis

The major concern of the study is to explore the Word Formation Processes (WFPs) used in SMS language. Descriptive statistics is used to answer the two research questions and Inferential Statistics is applied to test the research hypotheses.

In order to answer the first research question, what various WFPs are used in the SMS language of male and female students, the questionnaire was developed based on the classification of Thurlow and Brown (2003) of Word Formation Processes in SMS language which supports this research. For answering the first question simple percentages% were drawn from the data that was analyzed by applying the *frequency test* on *IBM SPSS Statistics 21.0*. The most common, prominent and frequent feature in WFPs is the shortening of the words. This shortening of the words is very commonly seen in SMS language and it involves the reduction of the letters in a word. The research showed that *Acronymy* is 66% used in SMS language. In *Acronymy* all the alphabets are pronounced as a single word but all the alphabets are written in capital words like LOL, ROM, DELL and TC etc. (Hussain 2013) *Clipping* is 51% used in SMS language. *Backformation* is 69% used in SMS language. *Blending* is 46% used in SMS language. *Compounding* is 54% used in SMS language. *Onomatopoeic words* are 53% used in SMS language. Words in SMS language are also produced from non-standardized spelling reduction. These types of spelling reductions are not used in standard form of written language. These processes include the use of *letter homophones*, *number homophones* and *spelling reduction*. *Letter homophones* are 63% used in SMS language. The use of *number homophone* is 53%. Letter and number homophones includes words like gr8, be4, 2morrow, etc (Carrington 2004). Another important process that is observed in the SMS language of Urdu/English bilinguals was the use of *English inflection “ing” with Urdu verbs* and it is 52% used in the SMS language.(See Figure 1)



**Figure 1.** Word Formation Processes used in SMS language

The second research question was; What, if the Standard Word Formation processes are used more frequently as compared to Non- standard Word formation processes. In order to answer this question the items of the questionnaire were sub- scaled into Standard and Non-Standard Word Formation Processes. Standard WFPs includes clipping, blending, acronyms, compounding, backformation and onomatopoeic words. Non-standard WFPs includes the use of spelling reduction, number homophones and letter homophones. *Descriptive Statistics* was applied to the data by using SPSS and the result table shows a significant difference (Mean Standard WFPs=28.15, SD = 4.78, Mean Non-Standard WFPs = 14.20, SD=3.21).

### Results of research hypothesis

The results revealed that the Standard Word Formation Processes are used more frequently than the Non-standard Word Formation Processes

- 1- ( $H_0$ ) There is no significant difference in the mean score of male and female students of BBA in using Clipping. In order to test this hypothesis, Independent Sample t-test is applied. The t-test table shows that there is a significant difference in the mean value of both males and females in using clipping ( $t = -2.544$ ,  $df = 98$ ,  $Sig = .013$ ,  $Mean_{male} = 3.26$ ,  $Mean_{female} = 3.74$ ). Null hypothesis claiming no significant difference is therefore not accepted. Females use more clipping than males in their text messages

**Table 1.** Group Statistics

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	50	3.2600	.98582	.13942
Female	50	3.7400	.89921	.12717

2: ( $H_0$ ) There is no significant difference in the mean score of male and female students of BBA in the use of Word Formation Processes in their SMS language. In order to test this hypothesis, Independent Sample t-test was applied and after analyzing the data the results showed that there is a significant difference in the mean score of males and females in their SMS language ( $t = -3.012$ ,  $df = 98$ ,  $Sig. = .003$ , Mean males = 67.54, Mean females = 74.81). Null hypothesis claiming no significant difference is therefore not accepted.

Female students prefer using more Word Formation Processes than males in their text messages.

**Table 2.** Group Statistics

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	50	67.5457	11.31168	1.59971
Female	50	74.8115	12.76383	1.80508

### Conclusion and limitations

The analysis of Word formation Processes in SMS language indicates that the WFPs can mark gender boundaries. Different types of Word formation Processes are used in SMS language by males and females. Some of these processes are standard and some are non-standard. SMS language is considered to be a threat to the standard forms of language. But the study shows that Standard Word Formation Processes like clipping, blending, backformation and acronyms are more used in SMS language than spelling reduction, letter homophones and number homophones. The ratio of using WFPs is more in females than males. Clipping, acronymy, letter homophones are more used in the text messages of females. The study clearly reveals that females do not use standard forms of language in their SMS writing. The results of the study are not applicable to the SMS users aged above 25 and the research was limited to the bilingual speakers of English and Urdu language. Pakistan is a multilingual country and there is diversity in the use of language. Other languages like Punjabi, Saraiki and Balochi are also used in SMS language, so the impact of Word formation processes in SMS language can be studied further with reference to these languages.

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